

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/001859

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ H03H9/64, 9/145, 9/72

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ H03H3/08-3/10, 9/145, 9/25, 9/42-9/44, 9/64, 9/68, 9/72, 9/76

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Toroku Jitsuyo Shinan Koho	1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 9-107268 A (Toyo Communication Equipment Co., Ltd.), 22 April, 1997 (22.04.97), Claim 2; Par. Nos. [0005] to [0019]; Figs. 1 to 6 (Family: none)	1, 4-6 2, 7-11
Y	JP 2000-196409 A (Kyocera Corp.), 14 July, 2000 (14.07.00), Par. Nos. [0005] to [0019], [0034] to [0041]; Figs. 1 to 8, 12 to 13 (Family: none)	2, 9-11

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

- A- document defining the general state of the art which is not considered to be of particular relevance
- E- earlier application or patent but published on or after the international filing date
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- O- document referring to an oral disclosure, use, exhibition or other means
- P- document published prior to the international filing date but later than the priority date claimed

- T- later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- X- document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- Y- document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- &- document member of the same patent family

Date of the actual completion of the international search
20 April, 2005 (20.04.05)

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2000-068784 A (Oki Electric Industry Co., Ltd.), 03 March, 2000 (03.03.00), Par. Nos. [0012] to [0021]; Figs. 1 to 2 (Family: none)	1, 3-6 7-11
Y	JP 2003-051731 A (Murata Mfg. Co., Ltd.), 21 February, 2003 (21.02.03), Par. Nos. [0015] to [0018]; Figs. 1, 3 to 4 (Family: none)	7-11
Y	JP 2002-330055 A (TDK Corp.), 15 November, 2002 (15.11.02), Par. Nos. [0035] to [0039]; Figs. 5 to 6 & US 2002/0158708 A1	7-11